



Safety and Mission Assurance Services (SMAS) II Procurement DRFP NNG16547352R

Pre-Solicitation Conference
June 23, 2016 9:00a -11:30a



SAFETY and MISSION ASSURANCE
DIRECTORATE Code 300



AGENDA

- 8:30 – 9:00 Check-in
- 9:00 – 9:05 Welcome
- 9:05 – 9:30
 - Code 300 Introduction - Judy Bruner, Director of SMA
 - Risk Based SMA - Rich Barney, Deputy Director of SMA
- 9:30 – 10:00
 - Technical Overview – Isaac McGinnis, SMAS II Procurement Development Team (PDT) Lead
- 10:00 – 10:30
 - Procurement Overview – Danit Rainey, Contracting Officer (CO)
- 10:30 – 10:45 Caucus
- 10:45 – 11:30
 - Question Session –Moderated by CO
- 11:30
 - Adjourn

WELCOME

- Logistical Information
- Rules of Engagement
- Introduction of Government Team
- Purpose

LOGISTICS

- Use stairways in the event of a fire
- Restrooms are outside on the right, across from the elevators
- This presentation, attendee list and questions/answers will be placed in the SMAS II eLibrary
- Please hold all questions during the presentation until the Q&A session
- We will gather all questions (in writing) and our goal is to respond to all via FedBizOpps, www.fbo.gov

RULES OF ENGAGEMENT

- In the event of any inconsistency between data provided in these charts and the Final RFP, the language in the Final RFP, including any amendments, will govern
- We will gather all questions (in writing) and our goal is to respond to all via FedBizOpps, www.fbo.gov
- All responses provided during the Industry Day are preliminary. The official responses will be made available prior to the release of the Final RFP.
- Write questions on the notecards provided. Someone will collect the cards with questions.
- A 15 minute Caucus will be held to determine what can be answered in real time.
 - ❖ All questions received may be posted with answers on the FBO website <https://www.fbo.gov>.

POST RFP RELEASE “BLACK OUT”

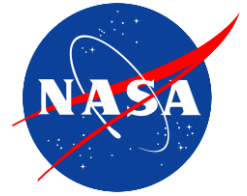
- All Communications upon release of the final RFP are formal and restricted. Formal and restricted during this phase means that NASA personnel, except the cognizant CO, shall refrain from formal and informal discussions with industry concerning the SEB procurement. All questions/inquiries must be directed to the CO.

GOVERNMENT TEAM

- Judy Bruner – Director of Safety and Mission Assurance
- Rich Barney – Deputy Director of Safety and Mission Assurance
- Isaac McGinnis – SMAS II Procurement Development Team Lead
- Danit Rainey – Contracting Officer

PURPOSE OF CONFERENCE

- Provide insight and explanations of certain features of the RFP
- Identify areas of the RFP that may be unique
- Provide guidance on what is expected



Code 300 Overview

Judy Bruner

Director of Safety and Mission Assurance



SAFETY and MISSION ASSURANCE
DIRECTORATE Code 300



Code 300 Vision & Mission

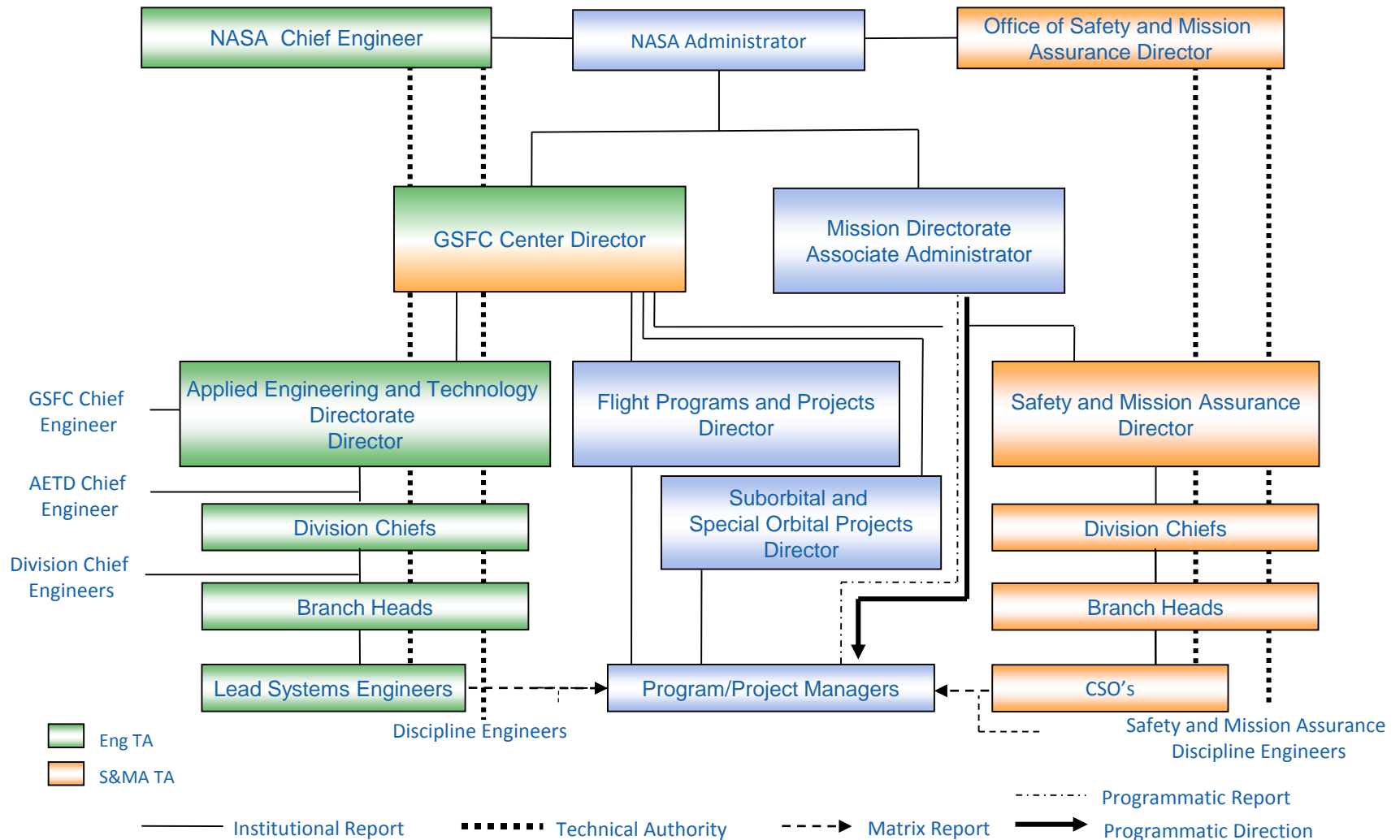
Vision: Safely reduce the risk of exploring Earth and Space to achieve 100% mission success.

Mission: Reduce the risk of exploring Earth and Space by providing a highly respected Safety and Mission Assurance workforce, who continuously characterizes risk, judiciously applies requirements, and conveys lessons learned to achieve 100% mission success.

Improve the center's ability to keep people, facilities, and operations safe

- Enable a more proactive and preventive approach to avoid issues that impact mission implementation
- Identify, communicate, and mitigate risk efficiently and effectively to assure mission success
- Balance Safety and Mission Assurance functions within a constrained resource environment

NASA Governance Model

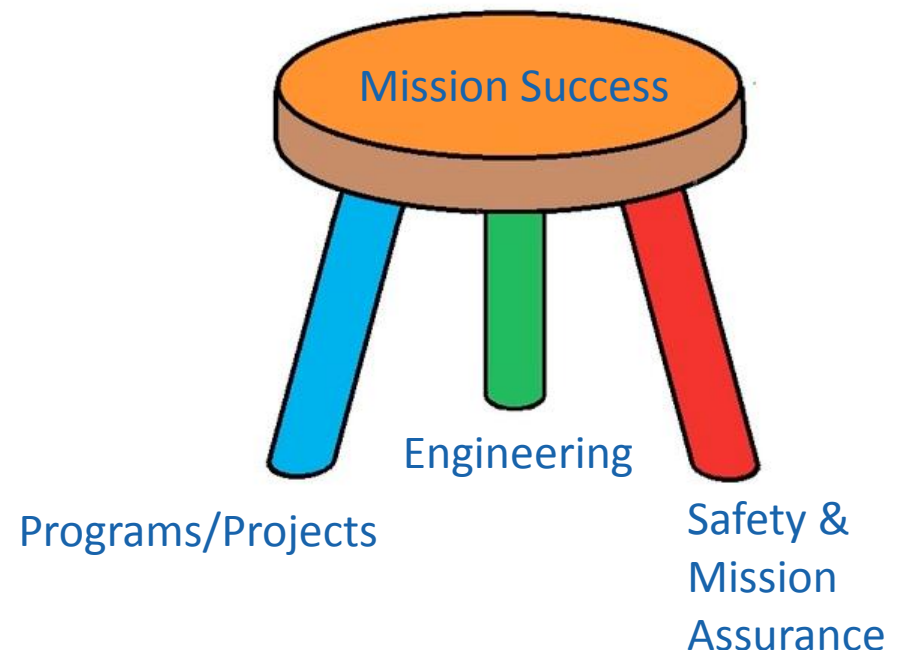


SMA Directorate Scope

- Is an independent organization that reports to the Deputy Center Director and provides SMA Technical Authority function.
- Focuses on mission success through continuous risk management-identification, characterization, assessment, mitigation, reporting and facilitating risk balancing.
- Has strong Institutional and Project Safety programs that provides a safety focus on our employees, our facilities, our missions and our surroundings.
- Provides a respected technically competent SMA workforce that is engaged throughout the project lifecycle (early proposal-through mission flight operations).
- Provides leadership for NASA project lifecycle and Goddard independent reviews.
- Assures that lessons are captured and learned from past decisions, analyses, and experiences.

Partners in Mission Success

- Mission Success requires Program/Projects, Engineering, and Safety & Mission Assurance to work together as partners.
- Differing opinions are encouraged and foster healthy tension and checks/balances.
- Technical Authority and Risk Management processes and practices exist for resolving differing opinions and negotiating paths forward, which may include elevating to Senior Management.



Why did we reorganize?

- Center Director asked us to define what the “right” type of SMA organization for Goddard should look like.
- We recognized that the current org structure is the result of piece part changes over several years rather than a strategic look at SMA at Goddard.
- We had become overly reliant on requirements without a current rationale for many of them.
- We often focused on eliminating the possibility of undesired events without linking them to credible risks or fully assessing unintended consequences.
- We have been reactive rather than proactive in the areas of quality and reliability, resulting in catching problems late that could have been predicted early with proper assessment.
- We did not have a rigorous closed loop center-wide quality engineering program.

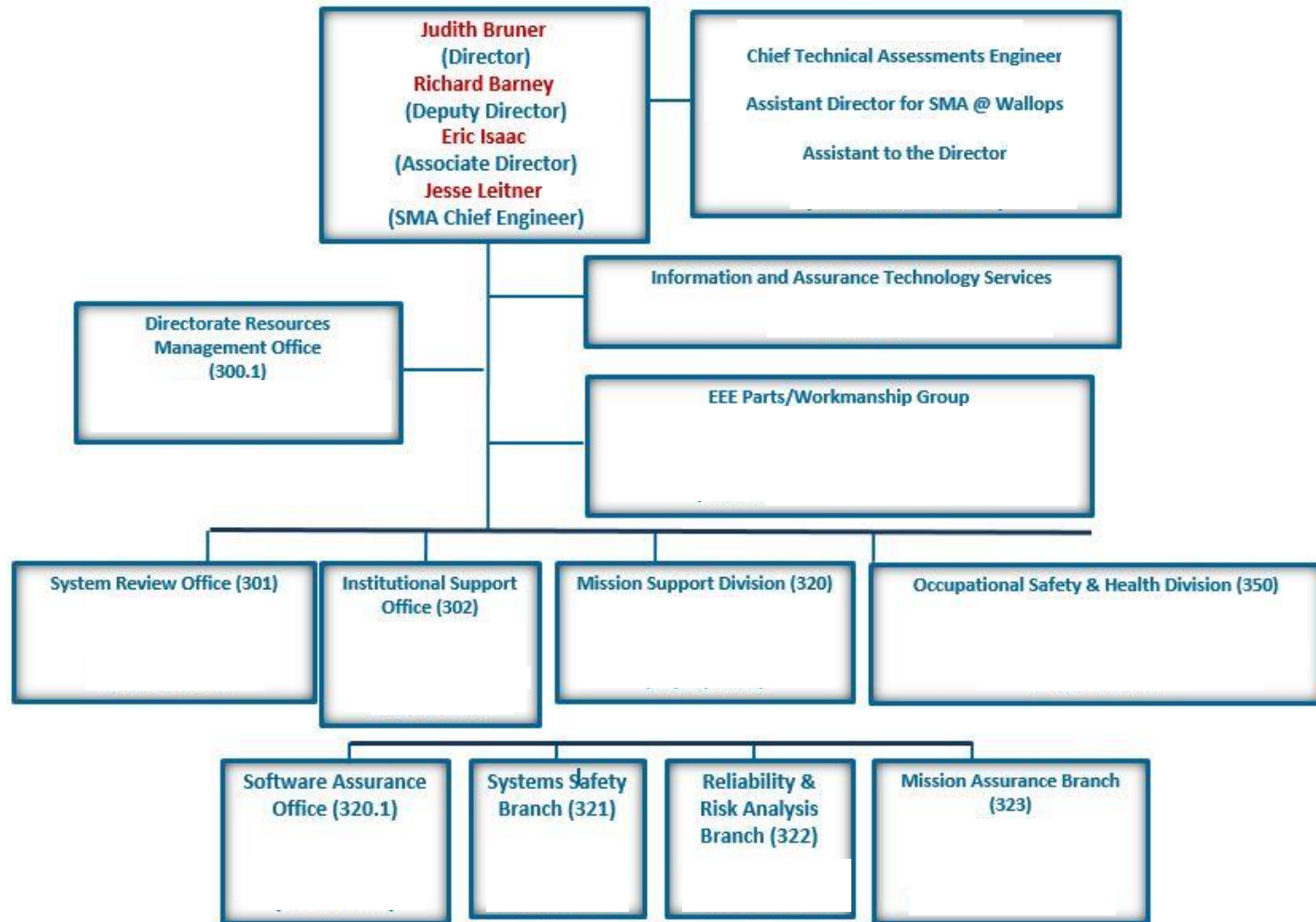
Features of the “right” SMA Organization

- SMA functions are managed in Code 300 and aligned to the Office of Safety and Mission Assurance (OSMA) programs.
- Strong technically competent workforce provides value added SMA leadership and support.
- Characterizing risk for varying mission classifications and approaches to project implementation is standard practice.
- Technical Authority is well defined for Project Chief Safety and Mission Assurance Officers (CSOs) as well as technical assurance disciplines.
- Clear career paths are proactively managed to develop SMA professionals.
- Lessons are learned from past decisions, analyses, and experiences.
- Quality Engineering is an integral part of a closed loop quality process.

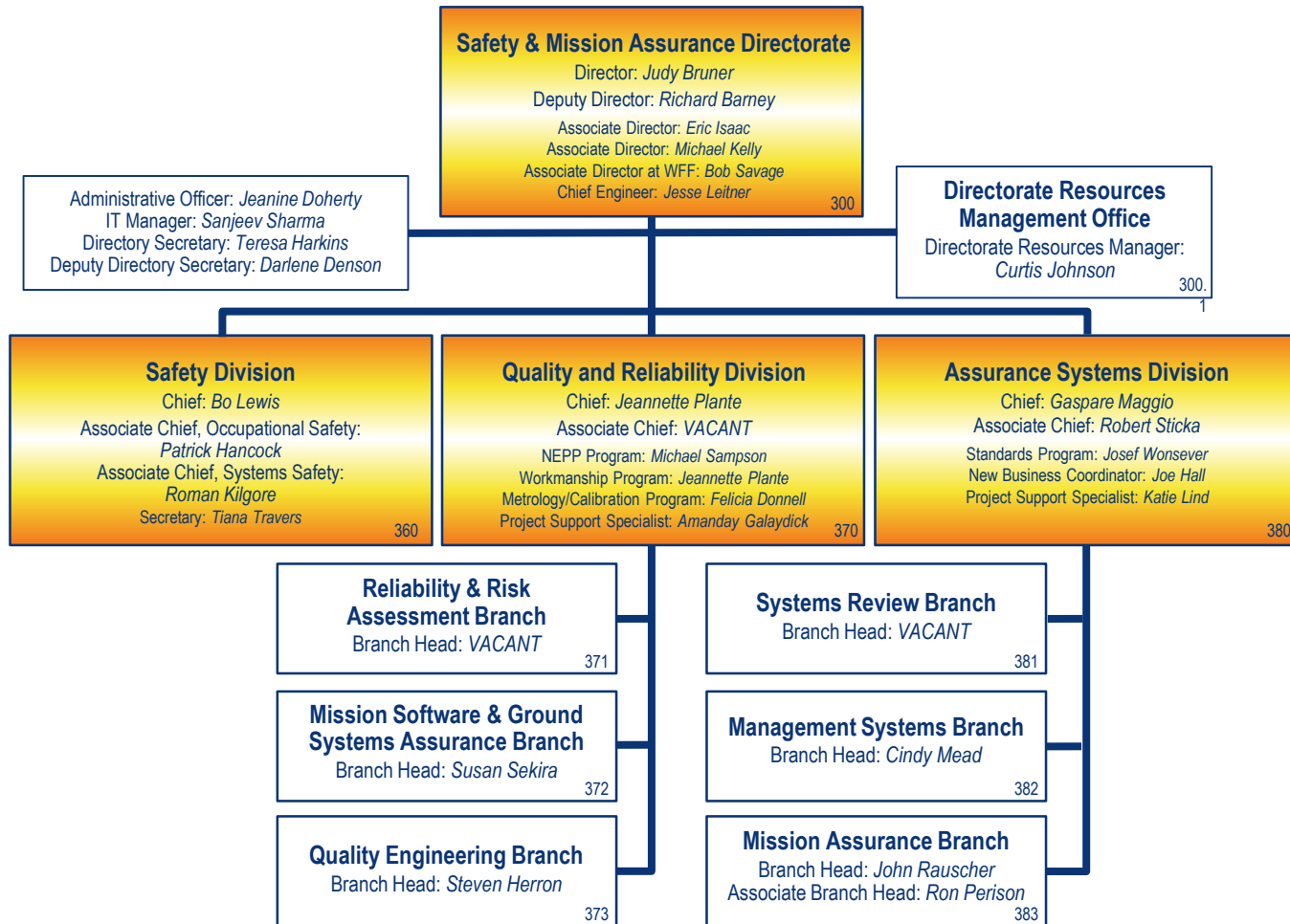
Strategic Changes

	<u>2007 Framework</u>	<u>2016 Framework</u>
Vision	We play a vital role in mission success.	Our vision is to safely reduce the risk of exploring Earth and Space to achieve 100% mission success
Mission	We provide an independent voice to enable Mission Success	Reduce the risk of exploring Earth and Space by providing a highly respected Safety and Mission Assurance workforce, who continuously characterizes risk, judiciously applies requirements, and conveys lessons learned to achieve 100% mission success.

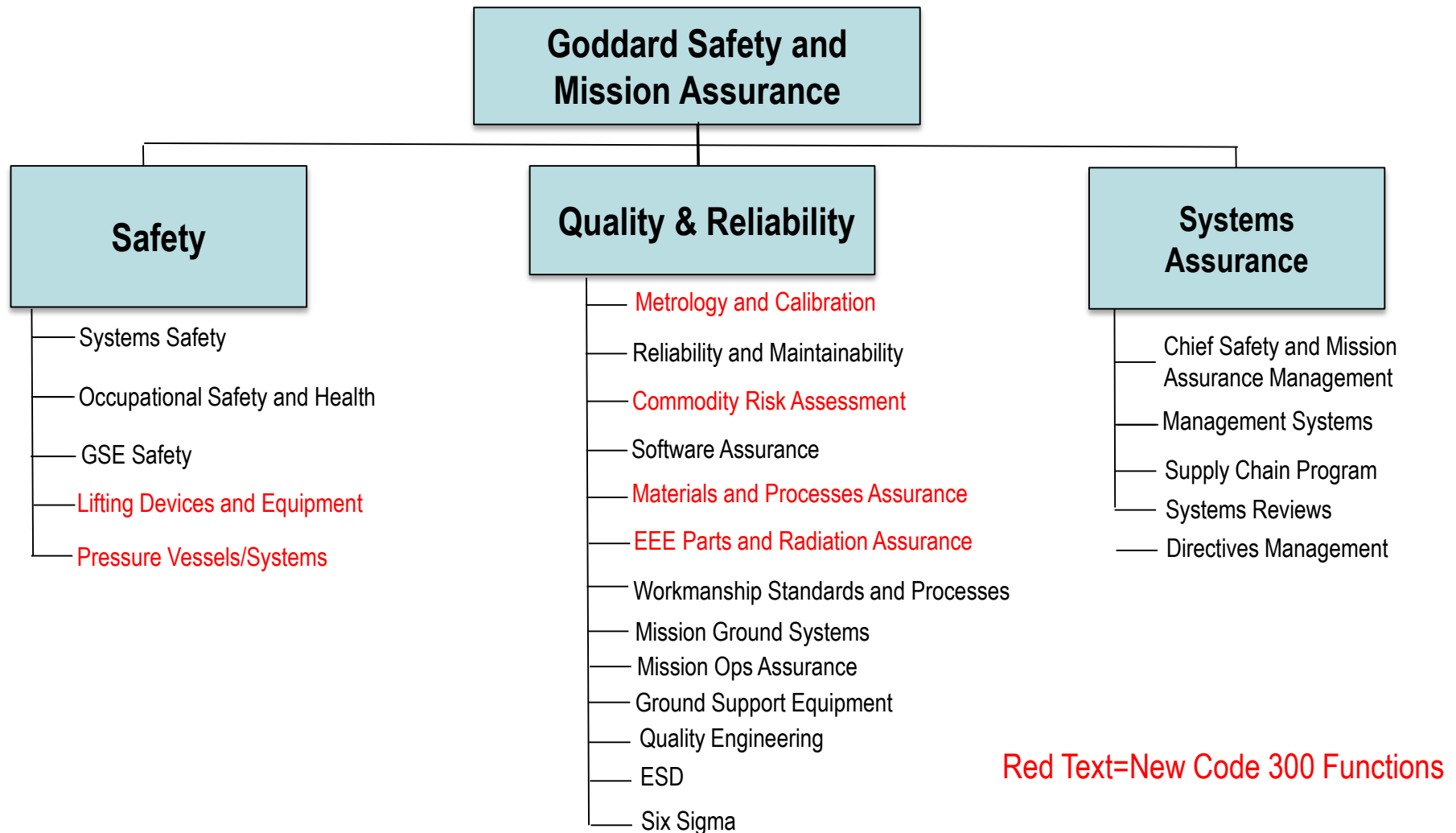
GSFC SMA Pre-Reorganization

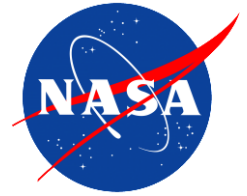


GSFC SMA Post-Reorganization



SMA Functional Alignment

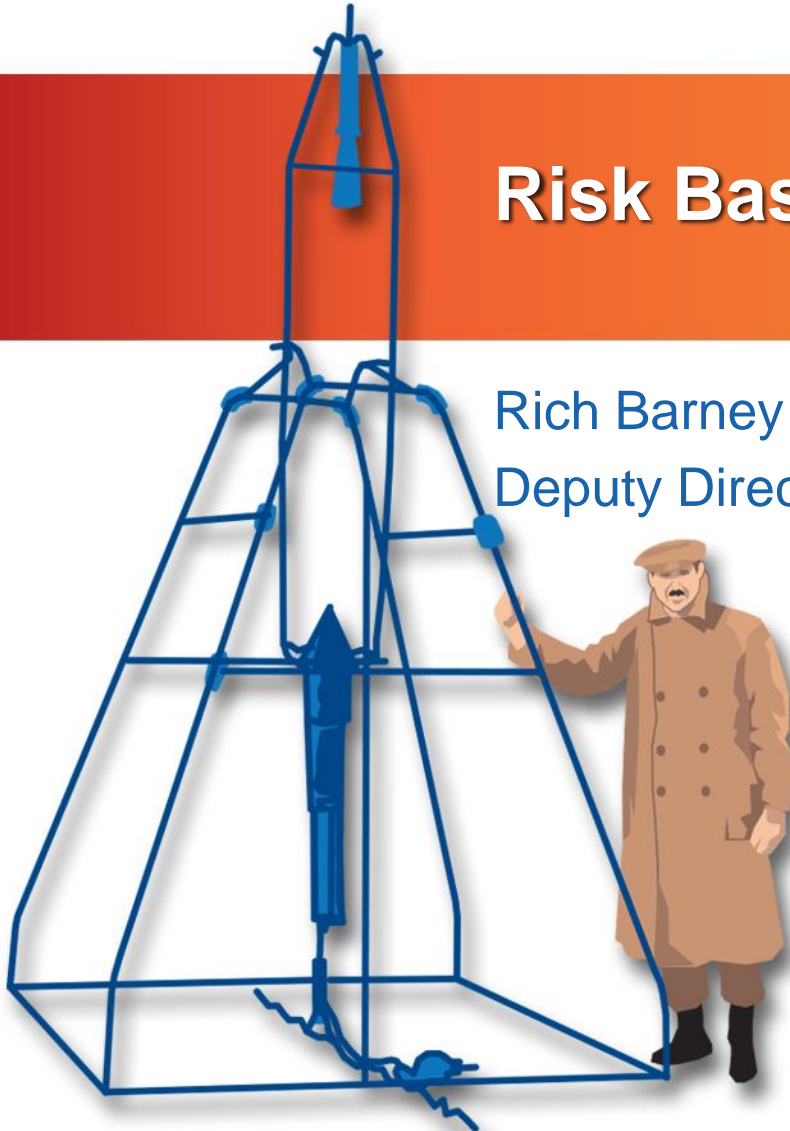




Risk Based SMA

Rich Barney

Deputy Director of Safety and Mission Assurance

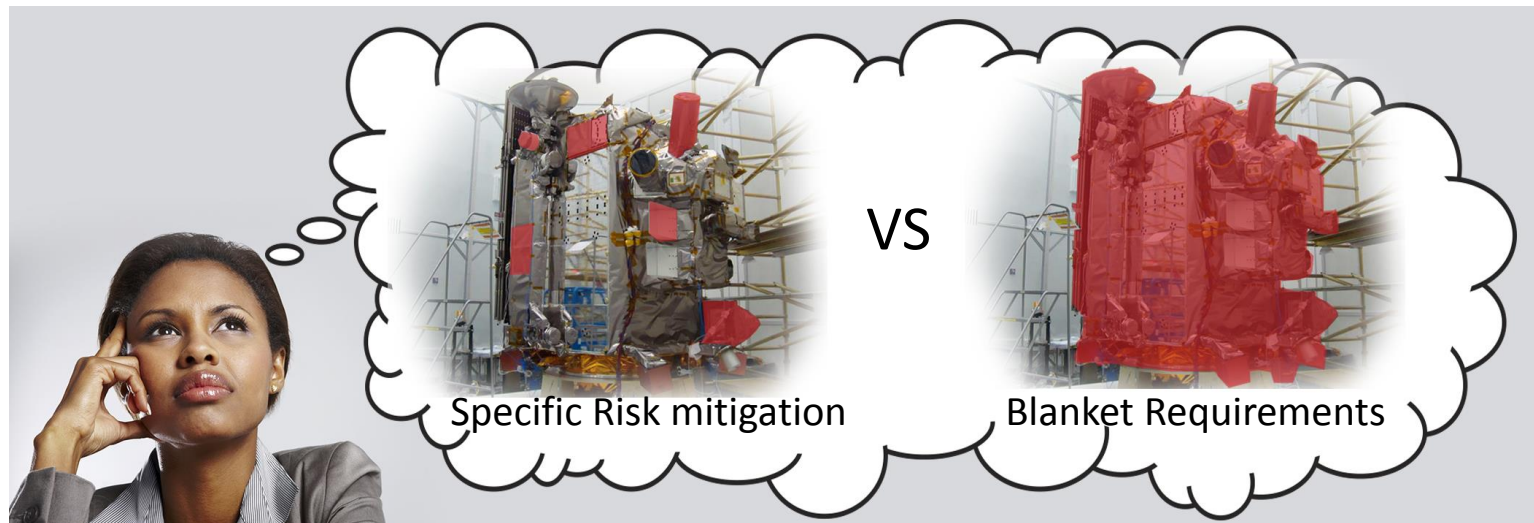


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What is Risk-Based SMA?

The process of applying limited resources to maximize the chance for safety & mission success by focusing on mitigating specific risks that are applicable to the project vs. simply enforcing a set of requirements because they have always worked.



Attributes of risk-based SMA

- Upfront assessment of reliability and risk, e.g. tall poles, to prioritize how resources and requirements will be applied
- Early discussions with developer on their approach for ensuring mission success (e.g., use of high-quality parts for critical items and lower grade parts where design is fault-tolerant)
- Judicious application of requirements based on learning from previous projects and the results from the reliability/risk assessments
- Characterization of risk for nonconforming items to determine suitability for use – project makes determination whether to accept, not accept, or mitigate risks based on consideration of all risks
- Continuous review of requirements for suitability based on current processes, technologies, and recent experiences.

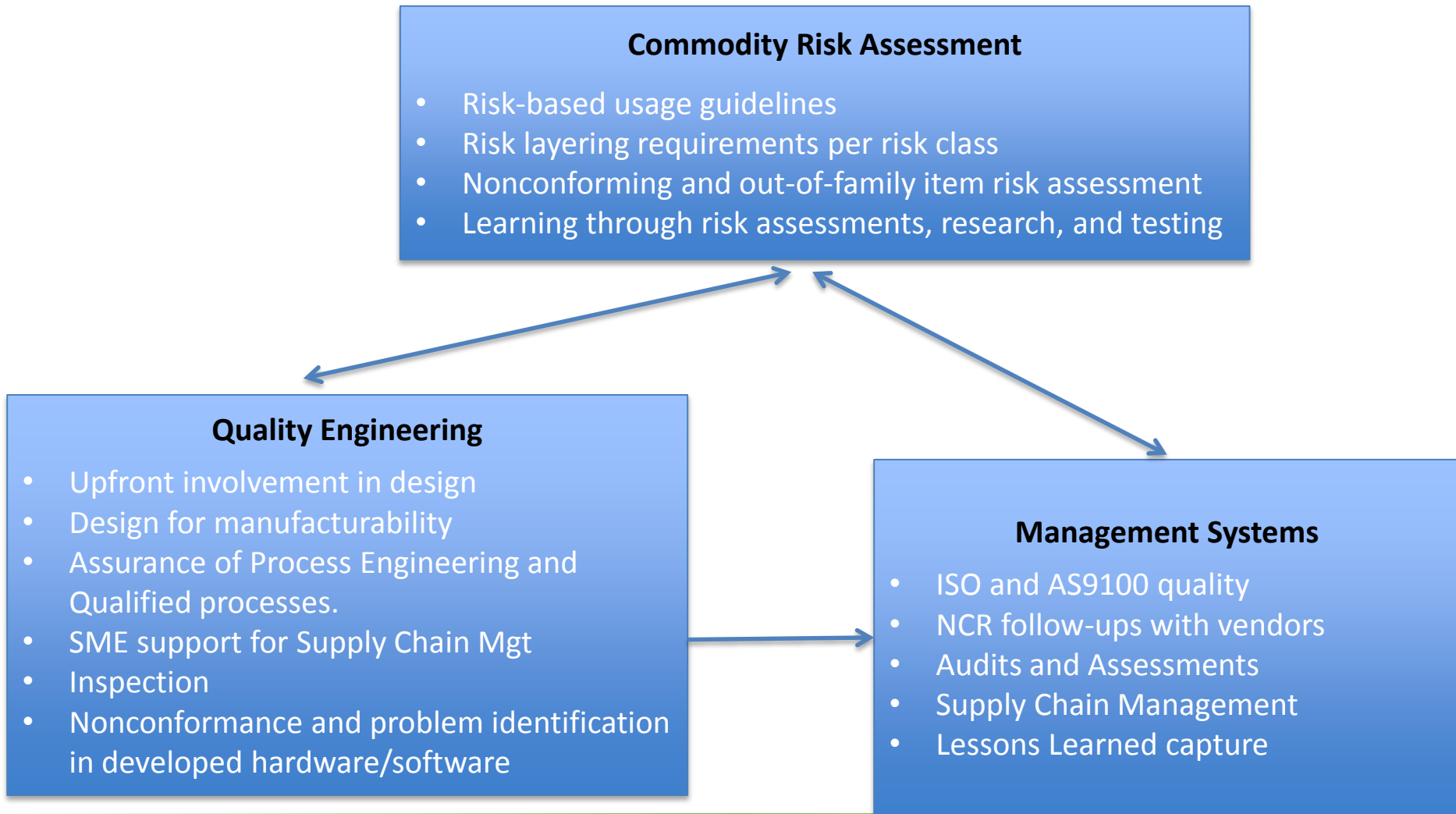
New Processes Underlie Risk-based SMA

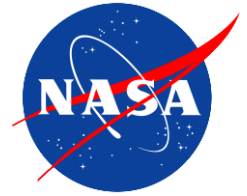
- Efficient dispositioning of Inherited Items
 - GPR 8730.5
- Definition and guidance across all risk classifications, risk-based SMA practices
 - GPR 8705.4
- Proactive processes and definition of Code 300 roles throughout the lifecycle
 - GPR 8730.10
- Better understanding and relationships with developers/vendors
 - All three directives

Transition to Risk-based approach

- Early discussion about inherited items being brought to the table
- Directives for proactively handling inherited items
 - Based on changes from previous developments
 - Design
 - Environment
 - Failures and anomalies
 - Based on assessment of elevated risk
- Component level qualification and history
- Use of Commodity Risk Assessment Engineer
- Focus is on “what is new” and risk areas determined from past history

The GSFC Quality Triangle

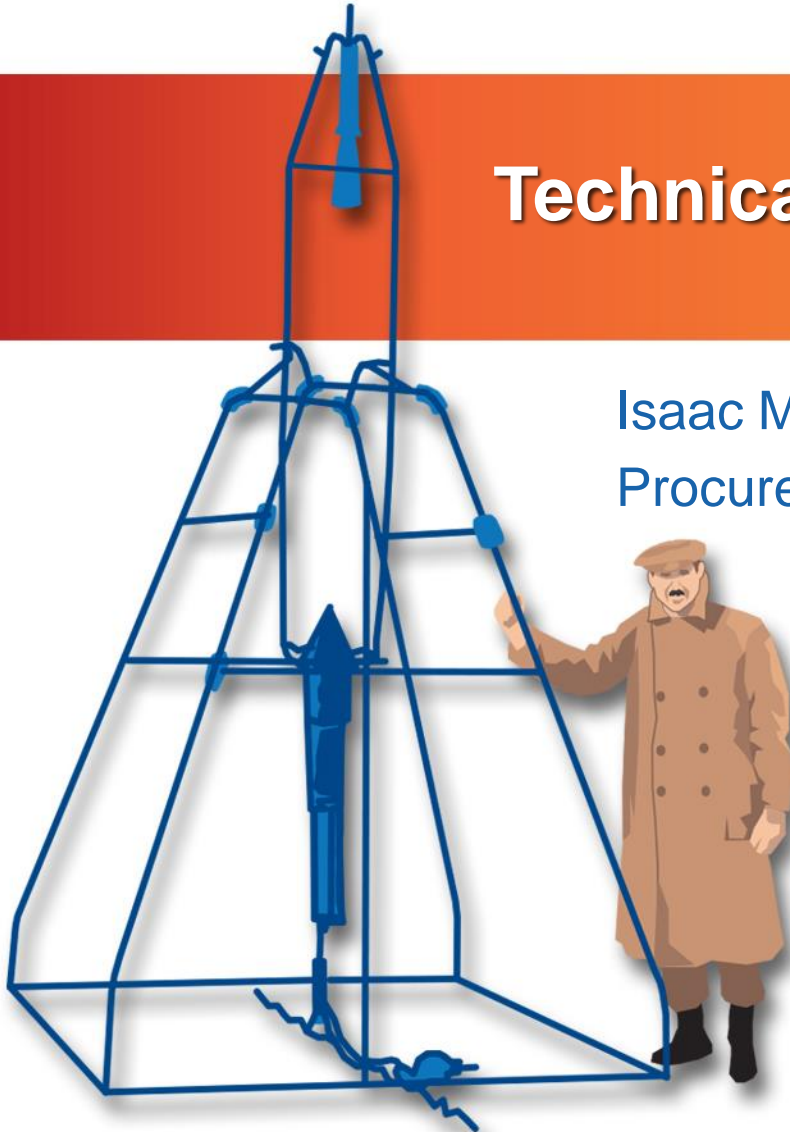




Technical Overview

Isaac McGinnis

Procurement Development Team Lead



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GSFC SMA Roles

Who are the GSFC SMA Professionals?

Safety Division (360)

- Project Safety Managers
- Project Safety Engineers
- Occupational Safety Managers Occupational Safety Engineers
- Fire Protection Engineers
- Industrial Hygienists
- Health Physicists

Quality and Reliability Division (370)

- Reliability and Maintainability Engineers
- Commodity Risk Assessment Engineers
- Program/Project Managers, Technical Standards Specialist
- Configuration Management Specialists
- Risk Manager
- Ground Systems Assurance Managers
- Software Assurance Engineers
- Mission Operations Assurance Engineers
- Quality Assurance Engineer
- Electrostatic Discharge (ESD) Control Program Manager
- Quality Assurance Specialist
- Goddard Space Flight Center Workmanship
- Parts and Radiation Assurance Engineer Program Manager
- Materials and Process Assurance Engineer
- Foreign Object Debris Program Manager
- Printed Circuit Board Coupon Engineering
- Technical Quality Assurance Leads (Mechanical, Electrical, Industrial, etc.)

Assurance Systems Division (380)

- Chief Safety and Mission Assurance Officers
- System Review Managers
- Management System Assessors
- Supply Chain Managers
- Information System Specialists
- Program/Project Managers
- Technical Standards Specialist
- Configuration Management Specialists

Safety Division- Code 360

Chief: *Bo Lewis*
Associate Chief, Occupational Safety: *Patrick Hancock*
Associate Chief, System Safety: *Roman Kilgore*

The Safety Division is responsible for overall management and implementation of occupational safety & health (OSH) and flight mission systems safety functions at GSFC Greenbelt.

OSH responsibilities involve providing direction (policy), performing oversight of GSFC Greenbelt operations, and providing professional services (consultation) to the Center in:

- Radiation Safety
- Cryogenic Safety
- Fall Protection
- Electrical Safety
- Industrial Hygiene
- Chemical Safety
- Mishap Program
- Confined Space
- Lifting Devices
- Pressure Vessel Systems

System Safety responsibilities include providing support to GSFC flight projects:

- Defining/interpreting/negotiating range safety requirements w/ Project and KSC/AF Range Safety
- Performing hazard analyses on flight hardware and ground support equipment (Safety Data Packages)
- Review/approve hazardous procedures & monitor hazardous operations at GSFC and launch site
- Develop Project Mishap Plans (MPCPs) and serve on IRT at launch site through launch operations.

Safety Division- Post Reorg Summary

- Integration of safety disciplines into one organization
- Responsibility for Pressure Vessels and Systems (PVS) and Lifting Devices and Equipment (LDE) moved into the safety organization
- PVS and LDE responsibilities for WFF reside in Code 803
- Better communication between occupational safety and systems safety functions
- Integration of PVS/LDE into the safety organization in line with the agency SMA structure
- Integration of mishap program for institutional and flight project oversight
- Seamless support for all areas of safety for the center
- Improved coordination and implementation of project mishap preparedness and contingency plans (MPCPs)

Quality and Reliability Division- Code 370

Chief: *Jeannette Plante*
Associate Chief: *Vacant*
NEPP Program: *Michael Sampson*
Workmanship Program: *Jeannette Plante*
Metrology/Calibration Program: *Felicia Donnell*

The Quality and Reliability Division is responsible for the overall management and implementation of reliability & risk assessment, mission software and ground systems assurance, and quality engineering functions.

Reliability & Risk Assessment Branch

371

Provides proactive analytical support, consultation, and technical authority for GSFC's interpretation, flow down, and integration of reliability, maintainability, and risk assessment activities throughout all phases of space systems development and execution; and provides training and consultation for effective Risk Management execution.

Mission Software & Ground Systems Assurance Branch

372

Provides assurance of software, ground systems, and mission operations through all phases of the lifecycle. Includes assurance of flight and ground software, legacy systems, off-the shelf components, communications infrastructure, and new development.

Quality Engineering Branch

373

Provides customers with quality based engineering solutions for flight hardware.

Quality and Reliability Division- Post Reorg Summary

Reliability & Risk Assessment Branch

- Use of Commodity Risk Assessment Engineers (CRAEs) to ensure that decisions are informed by proper risk context and that corresponding lessons learned are applied from project to project
- Cross-Cutting Risk Management process for SMA

Mission Software & Ground Systems Assurance Branch

- SMA integrated approach to Mission Operations
- Seamless transition of assurance from project development to mission operations
- Trending of PR/PFRs and SOARs via the Center's Meta tool
- Cross-project trends via Mission Ops Assurance

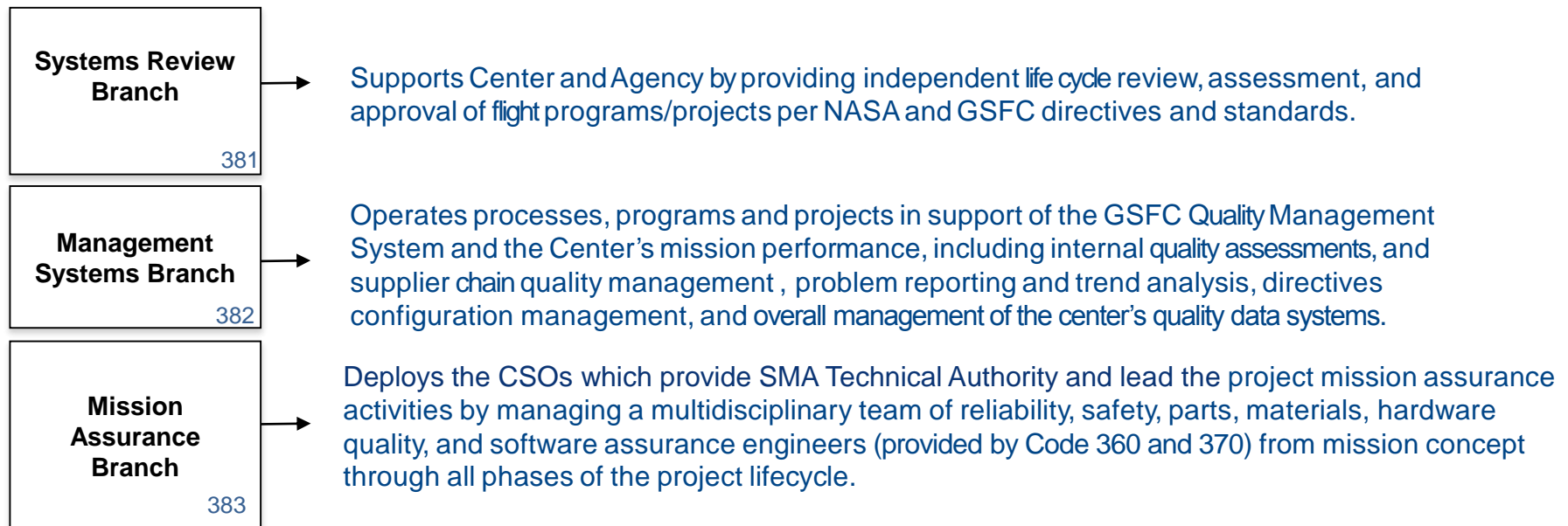
Quality Engineering Branch

- Use of Design for Manufacturability (DFM), Design for Assembly (DFA), and Design for Six Sigma (DFSS) methodologies and tools to help build quality into designs
- Quality Assurance Engineers organizationally separated from Flight CSO's to increase quality focus
- Expertise in Electrical, Electronic, and Electro-Mechanical (EEE) Parts, Radiation, and Materials and Processes

Assurance Systems Division- Code 380

Chief: *Gaspare Maggio*
Associate Chief: *Robert Sticka*
Standards Program: *Josef Wonsever*
New Business Coordinator: *Joe Hall*

The Assurance Systems Division (ASD) is responsible for management and implementation of independent systems reviews, institutional quality management systems, supply chain quality management, and overall mission assurance leadership for flight projects.



Assurance Systems Division- Post Reorg Summary

Systems Review Branch

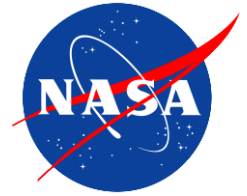
- Review resource needs will be continuously tracked and coordinated with the projects we support
- RFA tracking system will be upgraded to better meet the needs of the projects we support
- Regular use of updated resource estimates and variance analyses in support of the projects under review
- More consistent conduct of Center Standing Review Boards and Goddard System Review Teams

Management Systems Branch

- New analytical products, such as Supplier Risk Analyses, to provide greater insight into supplier / supply chain risks to mission performance
- New platform for SMA and Center-wide teamwork via the Meta information system, enabling improved process management, data management, and analytics

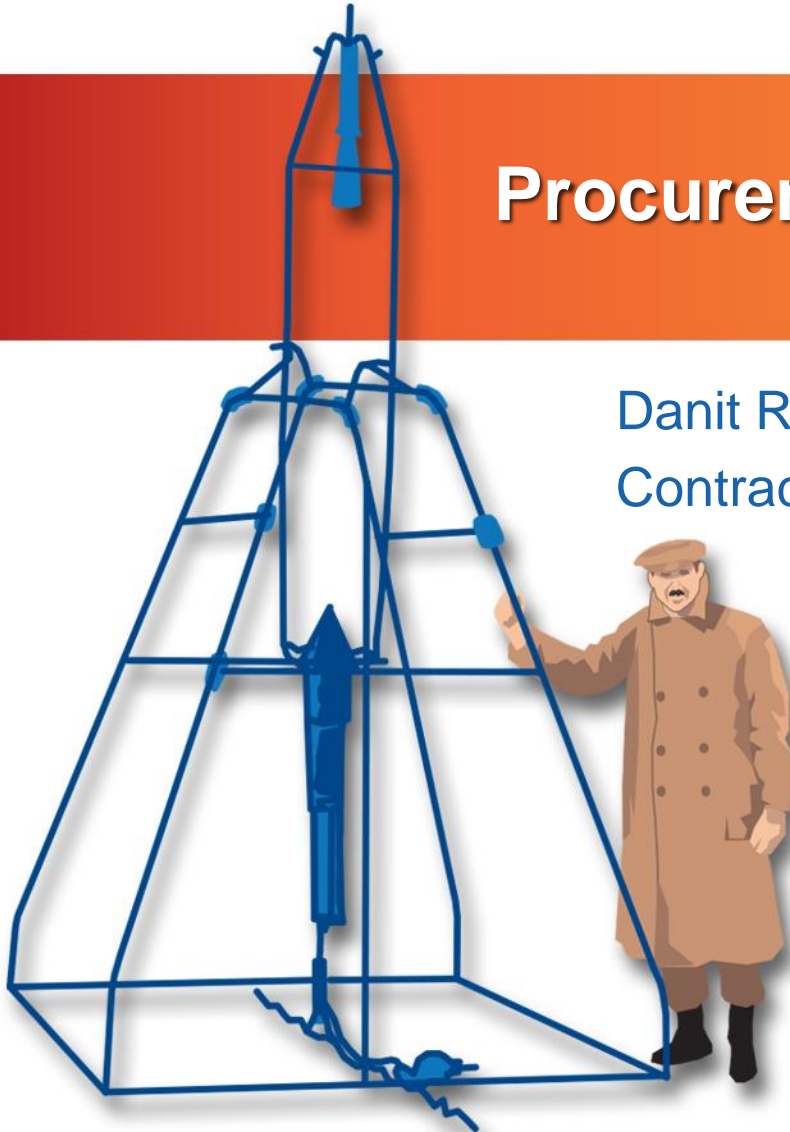
Mission Assurance Branch

- Trending of PR/PFRs and SOARs via the Center's Meta tool
- CSO role refined to manage SMA-assigned support discipline engineers while providing direct communications to Flight Projects
- Use of new tools such as Meta to identify and track problem suppliers



Procurement Overview

Danit Rainey
Contracting Officer



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HISTORICAL INFORMATION

- Safety and Mission Assurance Services are currently provided through a Cost Plus Fixed Fee Contract with ARES Corporation (SB)
- Contract Number NNG12CR32C
- The current contract value is \$180M
- Five year period of performance: June 1, 2012 –May 31, 2017

ACTIVITIES TO DATE

- SMAS II Sources Sought Synopsis initially posted April 24, 2015
 - Subsequent Request for Information (RFI) synopsis posted on August 10, 2015
- Draft SOW posted August 10, 2015
- Pre-Solicitation Synopsis posted January 12, 2016
- Established SMAS II Procurement eLibrary April 25, 2016
- SMAS II Draft RFP posted June 3, 2016
- Pre-Solicitation Conference on June 23, 2016

ANTICIPATED SCHEDULE

- Final RFP Release: Mid August 2016
- Proposals Received: Final RFP Release +30 Days
- Selection and Award: Spring 2017

RFP INFORMATION

The following applies:

- Small Business Set-Aside Competition
 - ❖ NAICS Code: 541712 Research and Development in the Physical, Engineering and Life Sciences (except Biotechnology); Size Standard 1,250 employees
- Period of Performance
 - ❖ 5-Year Effective Ordering Period

The following applies:

- Indefinite-Delivery Indefinite-Quantity Cost Plus Fixed Fee
- Contract Value:
 - ❖ Clause B.5 Estimated Cost and Fixed Fee
 - ❖ Cost and Fixed Fee To Be Proposed
 - ❖ Clause B.2 Minimum/Maximum Amount of Supplies or Services
 - ❖ The minimum IDIQ guarantees of \$1M with a maximum ordering value of \$185M

RFP INFORMATION (cont'd)

- Task Ordering Procedures
 - ❖ Refer to Clauses B.2, B.3, G.2, I.5, I.6, I.13, Attachment B –IDIQ Direct Labor Indirect Rates and Fee Matrices

ORGANIZATIONAL CONFLICT OF INTEREST

- **Impaired objectivity** – FAR 9.5 prohibits the Contractor from reviewing its own offers, products, or services, or those of its affiliate(s) or competitor(s) without proper safeguards to ensure objectivity in a manner that protects the Government's interests.
- To the extent a future NASA solicitation seeks products or services that are subject to review in performance of this contract, the Contractor will be ineligible to provide those products or services unless the Contractor submits a specific plan fully mitigating the OCI and such plan is approved by the SMAS Contracting Officer.
- If the Contractor, under the terms of this contract, or through the performance of tasks pursuant to this contract, is required to develop specifications or statements of work that are to be incorporated into a described in that solicitation as a prime or first-tier subcontractor under an ensuing NASA contract. This restriction shall remain in effect for a reasonable time, as agreed to by the Contracting Officer and the Contractor, sufficient to avoid unfair competitive advantage or potential bias.

ADDITIONAL CONSIDERATIONS

- A new piece of work will be performed under the SMAS II contract from Code 500 –Lifting Devices Engineering and Pressure Vessel Systems. This work will require the addition of a Collective Bargaining Agreement.
 - ❖ Enclosure 2 –Contract Historical Data

PLACE OF PERFORMANCE

- Place of Performance:
 - Goddard Space Flight Center, Greenbelt, MD (including Wallops Flight Facility, VA)
 - Contractor's Facility
 - Alternate sites as designated in Task Orders

INSTALLATION ACCOUNTABLE GOVERNMENT PROPERTY

- Installation Accountable Government Property
 - ❖ Made available for use in the performance of the contract at the Government facility
- Government Furnished Property
 - ❖ NASA will provide 32 computers to be used offsite at various locations

SECURITY CONSIDERATIONS

- DD 254 (Attachment J)
 - ❖ NFS 1852.204-76 Security Requirements for Unclassified Information Technology Resources (Jan 2011)
 - ❖ Performance under this contract will involve access to and/or generation of classified information. A DD254, Contract Security Classification Specification, for a facilities clearance at the level of Secret will be prepared and coordinated with the Security Office
 - ❖ Foreign travel is anticipated under this contract. Contractor personnel will be required to comply with all U.S. export control laws and regulations, including International Traffic in Arms Regulations (ITAR), NPR 1660.1 and receive foreign travel briefings prior to and once travel is completed.
 - ❖ Personal Identity Verification of Contractor Personnel
 - ❖ Clause H.2 Contractor Personnel –Identification, Reporting and Checkout Procedures (Apr 2013)
 - ❖ Attachment E –Personal Identity Verification Issuance Procedures

OVERALL EVALUATION

- Conducted in accordance with FAR 15.3/NFS 1815.3 Source Selection Procedures
- Evaluation Factors
 - ❖ Mission Suitability (point scored)
 - ❖ Cost
 - ❖ Past Performance (adjectival rating)
- Award on initial offers is anticipated, but the Government reserves the right to hold discussions with Offerors

RELATIVE ORDER OF IMPORTANCE OF EVALUATION FACTORS – PROVISION M.1.3

- The Cost Factor is significantly less important than the combined importance of the Mission Suitability Factor and the Past Performance Factor.
- As individual factors, the Cost Factor is the least important and the Mission Suitability Factor is more important than the Past Performance Factor.

MISSION SUITABILITY FACTOR

- Subfactors and Weights (Provision M.3.3)

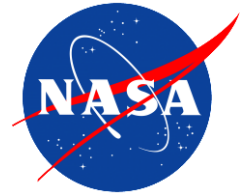
❖ SubFactor A: Technical Approach	450
❖ SubFactor B: Management Approach	<u>550</u>
	1000

COST EXHIBITS –GENERAL DIRECTIONS

- All cost charts must be completed in their entirety
- All exhibits and schedules pertaining to a rollup must be linked
- Each significant subcontractor must complete Exhibits 2A, 2B, and 4 through 11B and provide the same supporting information that is requested from the Prime Offeror
- Significant subcontractors must submit proprietary cost data, under separate cover, directly to the Government no later than the date specified in the instructions for receipt of proposals for this RFP.
- Non-Significant Subcontractors shall complete and submit Exhibit 2C and if applicable, Exhibit 2D, which should be included with the Prime Offeror's Cost Volume proposal. **If deemed proprietary, Non-Significant Subcontractors may submit Exhibits 2C and 2D under separate cover directly to the Government no later than the date and time specified in the instructions for receipt of proposals for this RFP.

WEB SITES

- Documents related to the SMAS II procurement will be attainable through the Federal Business Opportunities (FBO) website at <https://www.fbo.gov>.
- The SMAS II Procurement eLibrary is located at the following website: <http://elibrary.gsfc.nasa.gov/>.
 - ❖ Contains all SMAS II related information including Applicable Documents, Reference Documents, Background information and RFP documentation
- Pre-solicitation charts and questions/answers may be posted on both the FBO website and the SMAS II Procurement eLibrary.
- Check the FBO website periodically for updates.

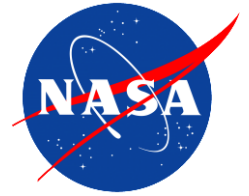


QUESTIONS

Danit Rainey
Contracting Officer



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ADJOURN



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